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COMPARISON OF ERTS-1 AND SKYLAB-EREP
FOR INTERDISCIPLINARY COASTAL INVESTIGATIONS

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SKYLAB-EREP FOR INTERDISCIPLINARY COASTAL
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Report on Significant Results

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SIGNIFICANT RESULTS

NASA's ERTS-1 satellite and Skylab-EREP have both provided imagery suitable for investigating coastal vegetation, land use, current circulation, water turbidity, waste disposal, and sea state. Based on high-contrast targets, such as piers and breakwaters, the ERTS-1 MSS seems to have a resolution of 70-100 meters, Skylab's S190A about 30-70 meters, and its S190B about 10-30 meters. Important coastal land use details can be more readily mapped using Skylab's imagery. On the other hand, the regular eighteen day cycle of ERTS-1 allows observation of important man-made and natural changes, and facilitates collection of ground truth. The Skylab/EREP multispectral scanner offers 13 spectral bands as compared to 4 bands on ERTS-1. However, EREP scanner tapes require special filtering to remove several types of noise and their conical line scan pattern must be linearized before one can identify small targets based on spatial features.